

REMARKS

Claims 1 to 37 are pending in this application. Claims 1, 10, 18, 19, 20, and 33 are independent. No claims are changed in the present Response.

Claims 1-17 and 19 stand rejected by the Examiner under 35 U.S.C. § 102(e) in view of U.S. Patent Application No. 2003/0126195, filed by Daniel A. Reynolds *et al.* on April 10, 2001 (hereinafter, "Reynolds"). Claim 18 stands rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Reynolds in view of U.S. Patent No. 6,549,943, issued to Maximilian Spring *et al.* on April 15, 2003 (hereinafter, "Spring"). Claims 20-37 stand rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Reynolds in view of U.S. Patent Application No. 2001/0055017, filed by Bas Ording *et al.* on January 5, 2001 (hereinafter, "Ording").

Applicant's arguments in response to the shortcomings of the teachings of Reynolds and Ording have been articulated in the previous office actions, all of which are incorporated herein by reference.

Claim Rejections - 35 U.S.C. § 102(e)

Claims 1-17 and 19 stand rejected by the Examiner under 35 U.S.C. § 102(e) as anticipated by Reynolds. Applicants respectfully traverse this rejection.

Independent claims 1 and 10 recite "monitoring program code, asynchronous with respect to said control program code, for **generating** at least **one event** indication **in response** to a **change** of at least one predetermined **attribute of said embedded device** and forwarding said at least one event indication to said control program code".

There are no teachings in Reynolds of a monitoring program doing anything in response to a change in an attribute of the embedded device. See Reynolds at paragraphs [0504] through [0506].

[0504] Master SMS 184 periodically polls installation directory 1222 for new sub-directories including new

releases, for example, release 1.1 1218 in sub-directory 1220. When the master SMS detects a new release, it opens (and decompresses, if necessary) the packaging list in the new sub-directory and verifies that each software component listed in the packaging list is also stored in the new sub-directory. The master SMS then performs a checksum on each software component and compares the generated checksum to the checksum appended to the software component.

[0505] Once all software components are verified, the master SMS opens (and decompresses, if necessary) an upgrade instruction file also included as one of the software components loaded into sub-directory 1220 from the Installation Kit. The upgrade instruction file indicates the scope of the upgrade (i.e., upgrade mode). For instance, the upgrade instruction file may indicate that the upgrade may be hot or cold or must only be cold. The upgrade instruction file may also indicate that the upgrade may be done only across the entire chassis—that is, all applications to be upgraded must be upgraded simultaneously across the entire chassis—or that the upgrade may be done on a board-by-board basis or a path-by-path basis or some other partial chassis upgrade. A board-by-board upgrade may allow a network device administrator to chose certain boards on which to upgrade applications and allow older versions of the same applications to continue running on other boards. Similarly, path-by-path or other service related upgrades may allow the network administrator to chose to upgrade only the applications controlling particular services for particular customers, for example, a single path, while allowing older versions of the applications to continue to control the other services. Various upgrade modes are possible.

[0506] The upgrade instructions file may also include more detailed instructions such as the order in which each software component should be upgraded. That is, if several applications are to be upgraded, certain ones may need to be upgraded before certain other ones. Similarly, certain software components may need to be upgraded simultaneously. Moreover, certain boards may need to be upgraded prior to other boards. For example, control processor card 12 may need to be upgraded prior to upgrading any line cards.

Nothing is done to monitor the board's (compare to Applicants "embedded device") attributes; all actions are taken by the Master SMS. Paragraph [0504] does do polling, but it polls the installation directory, not the embedded device.

The argument in both the first office action and the current office action recite the claims language for this term verbatim and then provides the citation to the above paragraphs. Elements of a claim can not be ignored. If the elements do not exist in Reynolds, then a 35 U.S.C. § 102(e) rejection can not be sustained. The second office action states:

- b. In response to Applicant's arguments in the second paragraph of p. 11, *Reynolds et al.* discloses that, *a board-by-board upgrade may allow a network device administrator to [choose] certain boards on which to upgrade applications and allow older versions of the same applications to continue running on other boards* (paragraph [0505]).

However, this too, fails to show where the "monitoring program...generating at least one event indication in response to a change...of an attribute of the embedded device" claim term is found.

This element is simply missing from the teachings of Reynolds, and claims 1 and 10 are not anticipated. The rejection under 35 U.S.C. § 102(e) must be withdrawn.

Claims 2-9 and 11-17 depend upon depend upon claim 1 or 10 and are therefore distinct from Reynolds for the above reasons.

Independent claim 19 also includes the term "...means for monitoring an embedded device..." As discussed above, this is not taught by Reynolds and the rejections under 35 U.S.C. § 102(e) must be withdrawn.

Claim Rejections - 35 U.S.C. § 103(a) – Reynolds/Spring

Claim 18 stands rejected by the Examiner under 35 U.S.C. § 103(a) as unpatentable over Reynolds in view of Spring. Applicants respectfully traverse this rejection.

Reynolds is drawn to a common command interface to provide an interface abstraction for network devices (Reynolds Abstract). Spring is drawn to a device for creating and storing information that defines one or more network devices (Spring Abstract). Neither addresses all of the elements of the Applicants intelligent device upgrade engine.

The Examiner uses Reynolds for the functionality disclosure and looks to Spring to provide the implementation in a computer program product. However, as seen above, Reynolds does not teach all elements of the functionality of this claim. Claim 18 contains the term "...monitoring program code for generating asynchronous with respect to said control program code, at least one event indication in response to a change of at least one predetermined attribute of said embedded device and forwarding said at least one event indication to said control program code..." As discussed above, Reynolds does not teach the monitoring of an attribute in the embedded device. Spring does not teach this either (it has no teachings on embedded devices), and the rejections under 35 U.S.C. § 103(a) must be withdrawn.

Claim Rejections - 35 U.S.C. § 103(a) – Reynolds/Ording

Claims 20-37 stand rejected by the Examiner under 35 U.S.C. § 103(a) as unpatentable over Reynolds in view of Ording. Applicants respectfully traverse this rejection.

Reynolds is drawn to a common command interface to provide an interface abstraction for network devices (Reynolds Abstract). Ording describes the drawing of a progress bar on a screen (Ording Abstract). Neither addresses all of the elements of the Applicants claims.

Claims 20 and 33 are independent, and each contains elements missing from the combination of Reynolds and Ording. Each of claims 20 and 33 contain the element "...asynchronously, with respect to replacing said code image, monitoring progress of replacing said code image in said embedded device..." (claim 33, there is similar language in claim 20).

Ording does not monitor the embedded device; there is no indication that Ording does any more than monitor itself. See [0024]: "Each time a predetermined event occurs, e.g. the computer's internal clock is updated, the index is incremented by the thread to point to the next image in the sequence." This is the only indication in Ording of the monitoring of any physical attribute, and the attribute comes from the computer itself, not from an embedded device as required by claims 20 and 33.

Reynolds suffers from a similar deficiency. Reynolds does not monitor the embedded device either. In the discussion above, it is clear that during Reynolds's download to the boards, there is no monitoring at all, and certainly no monitoring of progress. The Examiner tries to use paragraphs [0119] and [0127] where the NMS servers accesses device statistics within a network device [0119]. However, this has nothing to do with the SMS downloading an upgrade to a board. There is no correlation in Reynolds between the SMS and the NMS, nor is there any correlation between the board and the network devices. Each are different, unrelated elements.

Since this element is not found in either Reynolds or in Ording, the rejection under 35 U.S.C. § 103(a) is not proper, and Applicants request that the Examiner remove this rejection from claims 20 and 33.

Claims 21-32 depend upon independent claim 20 and claims 34-37 depend upon independent claim 33, and all are distinct for the reasons described above.

For these reasons, withdrawal of the rejection of claims 20-37 is also requested.

CONCLUSION

The pending claims define subject matter that is distinct from both Reynolds, Spring, and Ording and Mayo. Claims 1-37 are pending and in condition for allowance. Applicants respectfully request prompt issuance of this application.

The commissioner is authorized to charge deposit account 503650 for any fees associated herein.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. Baker, Jr.', is written over a horizontal line.

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